

# (12) United States Patent

## Pulliam et al.

## (54) KINGPIN ADAPTER

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CPC ...... *B60D 1/075* (2013.01); *B60D 1/015* (2013.01); **B60D 1/06** (2013.01); **B62D** 53/0842 (2013.01)

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#### **References Cited** (56)

### U.S. PATENT DOCUMENTS

2017/0267040 A1\* 9/2017 Pulliam ...... B60D 1/07

#### FOREIGN PATENT DOCUMENTS

102011053861 B3 \* 2/2013 ...... B60D 1/075 DE

\* cited by examiner

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#### (57)**ABSTRACT**

A kingpin adapter is provided having an upper wall and a lower wall that are affixed to each other through side walls. The upper and lower walls have a kingpin aperture and a hitch ball aperture that is spaced from and parallel to the kingpin aperture. The kingpin aperture receives a kingpin and the adapter is affixed to the kingpin using pins that extend through the side walls and extend through a portion of the undercut in the kingpin. The upper wall has jack screws that extend through to contact a skid plate that is affixed to the kingpin. The jack screws affix optional adjustable fences that rotationally constrain the skid plate by contacting lateral edges of it.

## 16 Claims, 13 Drawing Sheets

